

**AMENDMENTS TO THE CLAIMS**

1. (Previously presented) A process for preparing a catalyst for olefin polymerization comprising the steps of bringing

(A) at least one organic transition metal compound,

(B) a mixture of at least two different organo metallic compounds of formula (V),

$M^1(R^1)_r(R^2)_s(R^3)_t$  (V)

where

$M^1$  is an alkali metal, an alkaline earth metal or a metal of group 13 of the Periodic Table,

$R^1$  is hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>6</sub>-C<sub>15</sub>-aryl, halo-C<sub>1</sub>-C<sub>10</sub>-alkyl, halo-C<sub>6</sub>-C<sub>15</sub>-aryl, C<sub>7</sub>-C<sub>40</sub>-arylalkyl, C<sub>7</sub>-C<sub>40</sub>-alkylaryl, C<sub>1</sub>-C<sub>10</sub>-alkoxy, halo-C<sub>7</sub>-C<sub>40</sub>-alkylaryl, halo-C<sub>7</sub>-C<sub>40</sub>-arylalkyl or halo-C<sub>1</sub>-C<sub>10</sub>-alkoxy,

$R^2$  and  $R^3$  are each hydrogen, C<sub>1</sub>-C<sub>10</sub>-alkyl, C<sub>6</sub>-C<sub>15</sub>-aryl, halo-C<sub>1</sub>-C<sub>10</sub>-alkyl, halo-C<sub>6</sub>-C<sub>15</sub>-aryl, C<sub>7</sub>-C<sub>40</sub>-arylalkyl, C<sub>7</sub>-C<sub>40</sub>-alkylaryl, C<sub>1</sub>-C<sub>10</sub>-alkoxy, halo-C<sub>7</sub>-C<sub>40</sub>-alkylaryl, halo-C<sub>7</sub>-C<sub>40</sub>-arylalkyl or halo-C<sub>1</sub>-C<sub>10</sub>-alkoxy,

$r$  is an integer from 1 to 3

and

$s$  and  $t$  are integers from 0 to 2, where the sum  $r+s+t$  corresponds to the valence of  $M^1$ ,

and

(C) at least one cation-forming compound

into contact with one another, wherein the organic transition metal compound A) is firstly combined with the mixture of the organo metallic compounds B).

2. (Original) A process for preparing a catalyst for olefin polymerization as claimed in claim 1, wherein

D) at least one support  
is used as further component.

3. (Previously presented) A process for preparing a catalyst for olefin polymerization as claimed in claim 1, wherein

E) at least one Lewis base  
is used as further component.

4. (Previously presented) A process for preparing a catalyst for olefin polymerization as claimed in claim 1, wherein the cation-forming compound is a strong uncharged Lewis acid, an ionic compound having a Lewis-acid cation, an ionic compound containing a Brönsted acid as cation, an aluminoxane or a modified aluminoxane in which at least some of the hydrocarbon radicals are replaced by alkoxy, aryloxy, siloxy or amide groups.

5. (Previously presented) A process for preparing a catalyst for olefin polymerization as claimed in claim 1, wherein the at least one cation-forming compound is obtained during the preparation of the catalyst by reacting a compound having at least one functional group containing active hydrogen with an organometallic compound.

6. (Original) A process for preparing a catalyst for olefin polymerization as claimed in claim 5, wherein the compound having at least one functional group containing active hydrogen is a hydroxyl-containing compound.
7. (Original) A process for preparing a catalyst for olefin polymerization as claimed in claim 6, wherein the hydroxyl groups are bound to an element of main group 13, 14 or 15 of the Periodic Table.
8. (Canceled)
9. (Canceled)
10. (Canceled)
11. (Previously presented) A process for preparing a catalyst for olefin polymerization as claimed in claim 2, wherein
  - E) at least one Lewis base is used as further component.
12. (Previously presented) A process for preparing a catalyst for olefin polymerization as claimed in claim 11, wherein the cation-forming compound is a strong uncharged Lewis acid, an ionic compound having a Lewis-acid cation, an ionic compound containing a Brönsted acid as cation or an aluminoxane or a modified aluminoxane in which at least some of the hydrocarbon radicals are replaced by alkoxy, aryloxy, siloxy or amide groups.

13. (Previously presented) A process for preparing a catalyst for olefin polymerization as claimed in claim 12, wherein the at least one cation-forming compound is obtained during the preparation of the catalyst by reacting a compound having at least one functional group containing active hydrogen with an organometallic compound.